

# STIC Search Report

# STIC Database Tracking Number: 140598

TO: Daniel J Davis Location: RND 6a74

Art Unit: 3731

Wednesday, December 22, 2004

Case Serial Number: 09/663250

From: John Sims Location: EIC 3700

**RND 8B31** 

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# Search Notes

Multiple files searched, but no useful results found.	Some patent results were found which might be useful;
watch the dates, however.	



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(Item 11 from file: 350)
 14/3,AB/50
DIALOG(R) File 350: Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
014327279
WPI Acc No: 2002-147982/200219
Related WPI Acc No: 2003-712428
XRAM Acc No: C02-045975
XRPX Acc No: N02-112149
  Site guard for use at all peripheral and central venipuncture infusion
  sites, sensitive areas, and for pediatric and adult patients comprises
  fabric connector affixed to hollow member to hold the site guard in place
  over the site
Patent Assignee: PROGRESSIVE IV'S INC (PROG-N); IV HOUSE INC (IVHO-N);
  ROZIER B (ROZI-I); VALLINO L (VALL-I)
Inventor: ROZIER B; VALLINO L; ROZIER B M; VALLINO L M
Number of Countries: 096 Number of Patents: 005
Patent Family:
Patent No
                                                            Week
                     Date
                             Applicat No
                                            Kind
                                                   Date
              Kind
                            WO 2001US20888 A
WO 200202174
              A1 20020110
                                                 20010629
                                                           200219
                                             Α
                                                 20010629
                                                           200237
AU 200171701
              Α
                   20020114
                            AU 200171701
US 20020092529 A1 20020718
                             US 2000608648
                                             Α
                                                 20000630 200254
                             US 2001261892
                                             Р
                                                 20010116
                             US 200246800
                                             Α
                                                 20020115
US 6526981
                             US 2000608648
                                             Α
                                                 20000630
               В1
                   20030304
                                                           200320
EP 1296738
               A1
                   20030402 EP 2001950734
                                             Α
                                                 20010629
                                                           200325
                             WO 2001US20888 A
                                                 20010629
Priority Applications (No Type Date): US 2001261892 P 20010116; US
  2000608648 A 20000630
Patent Details:
Patent No Kind Lan Pg
                                     Filing Notes
                         Main IPC
WO 200202174 A1 E 55 A61M-025/02
   Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
   CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS
   JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL
   PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200171701 A
                       A61M-025/02
                                     Based on patent WO 200202174
US 20020092529 A1
                       A61F-005/37
                                      CIP of application US 2000608648
                                     Provisional application US 2001261892
                       A61F-013/00
US 6526981
             В1
                                     Based on patent WO 200202174
EP 1296738
             A1 E
                       A61M-025/02
   Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
   LI LT LU LV MC MK NL PT RO SE SI TR
Abstract (Basic): WO 200202174 A1
Abstract (Basic):
        NOVELTY - Site guard comprises hollow member (12) having a base
    with an edge to be positioned upon a patient adjacent a site (48), and
    a fabric connector (14) affixed to the hollow member to hold the site
    quard in place over the site. The base has a width sufficient to
    straddle the site, and a length and height sufficient to cover the
    site. It is joined to a sidewall to form a cover.
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site. It is joined to a sidewall to form a cover.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of protecting a site, which comprises placing a hollow member with an edge over the site to protect the site, and securing the hollow member to the patient with a fabric connector.

USE - The site guard is used at all peripheral and central venipuncture infusion sites, sensitive areas, and for pediatric and adult patients. It can be used with e.g., active children, epileptic,

patients with involuntary movements, delirious or physically aggressive patients, or patients who are simply out of bed or ambulatory.

ADVANTAGE - The inventive site guard avoids difficulties with adhesives by securing a protective hollow member to at least one site with a fabric connector that does not use adhesives on patient's skin. Its universal design and use is more adaptable to irregular or hirsute body surfaces than those secured to patient's skin with adhesives. It adapts well to humid environments and allows for better stabilization of intravenous (IV) sites in cases where tape is inadequate or painful, e.g. on sensitive skin of geriatic patients and on neonatal and other pediatric patients, and when patient's skin is otherwise moist, sensitive, or unhealthy.

The use of a fabric connector to secure a hollow member over a site helps maintain the integrity of healthy and unhealthy skin, and reduces irritation caused by tape or device in contact with skin. It benefits at-home patients, and improves stability over tape in active patients apt to dislodge their (IV) inserts, e.g. active children, epileptic, patients with involuntary movements, delirious or physically aggressive patients, or patients who are simply out of bed and ambulatory.

DESCRIPTION OF DRAWING(S) - The figure is a plan view of the site quard covering a site on a hand.

Hollow member (12) Fabric connector (14) Site (48) pp; 55 DwgNo 1/18

## 14/3,AB/52 (Item 13 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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013957435

WPI Acc No: 2001-441649/200147

XRAM Acc No: C01-133409 XRPX Acc No: N01-326716

Intervertebral disc treatment device, compressible to allow insertion into a disc, and comprising a tissue growth factor

Patent Assignee: SDGI HOLDINGS INC (SDGI-N); MCKAY W F (MCKA-I)

Inventor: MCKAY W F

Number of Countries: 095 Number of Patents: 006

Patent Family:

Patent No Kind Date Applicat No Kind Date Week WO 200145577 20010628 WO 2000US42610 A 20001206 200147 B A2 AU 200143099 20010703 AU 200143099 Α 20001206 200164 Α A2 EP 2000992392 EP 1244388 20021002 Α 20001206 200265 WO 2000US42610 A 20001206 20021121 US 99169148 US 20020173851 A1 Р 19991206 200279 WO 2000US42610 A 20001206 US 2002165347 20020606 Α JP 2003518021 W 20030603 WO 2000US42610 A 20001206 200346 JP 2001546319 Α 20001206 AU 774481 20040701 AU 200143099 Α 20001206 200469 B2

Priority Applications (No Type Date): US 99169148 P 19991206; US 2002165347 A 20020606

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes WO 200145577 A2 E 46 A61B-017/70

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT

RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200143099 A A61B-017/70 Based on patent WO 200145577

EP 1244388 A2 E A61B-017/70 Based on patent WO 200145577
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI TR

US 20020173851 A1 A61F-002/44 Provisional application US 99169148

JP 2003518021 W 36 A61K-038/22 AU 774481 B2 A61B-017/70 Div ex application WO 2000US42610 Based on patent WO 200145577 Previous Publ. patent AU 200143099 Based on patent WO 200145577

Abstract (Basic): WO 200145577 A2 Abstract (Basic):

NOVELTY - An **intervertebral** disc treatment device comprises a fibrous body containing a tissue growth factor, which can be compressed to pass through an **opening** in the annulus fibrosis, and which expands when in place to hold it in position.

DETAILED DESCRIPTION - An **intervertebral disc** treatment device for treating a disc whilst retaining an intact annulus fibrosis comprises a compressible fibrous body configurable to a compressed state for passage through an **opening** in the annulus fibrosis into a disc cavity, and configurable to an expanded state in the disc cavity with a dimension greater than the **opening** so that it resists expulsion, the body includes an amount of a tissue growth factor.

INDEPENDENT CLAIMS are included for the following:

- (1) an **intervertebral disc** repair device comprising a bioresorbable body sized for introduction into a disc cavity, incorporating tissue growth factor;
- (2) an apparatus for treating a disc comprising the treatment device, and a delivery apparatus adapted to retain and selectively release the device;
- (3) a method (M1) for treating a disc comprising introducing a fibrous body into the cavity, and providing the tissue growth factor within the cavity;
- (5) a method (M3) of treating a disc comprising introducing a fibrous body into the cavity between adjacent vertebrae, with the body containing a tissue growth composition to stimulate soft tissue formation sufficient to accommodate at least a portion of the compressive loads occurring between adjacent vertebrae;
- (6) a method (M4) of preventing effluence from a disc cavity comprising inserting a fibrous plug containing a tissue growth composition into the cavity;
- (7) a method (M5) of treating a damaged disc comprising providing an **opening** in the disc, passing a non-prosthetic delivery device incorporating a tissue growth factor through the **opening**, and releasing the growth factor in the cavity;
- (8) a method (M6) of treating a damaged disc with a rupture opening comprising introducing tissue growth factor into the disc cavity and sealing the rupture opening with a sealant device; and
- (9) a method (M7) of treating a disc comprising introducing a load-bearing, polyester implant into an **opening** of an annulus fibrosis.

USE - For restoring function to the spine by treating damaged  ${\tt intervertebral}$  discs .

ADVANTAGE - The treatment stimulates tissue formation.

## 20/3,K/22 DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 004659517 WPI Acc No: 1986-162859/198626 XRAM Acc No: C86-069678 XRPX Acc No: N86-121374

Device for closing holes in bones and marrow cavities - against internal pressure to prevent bleeding and infection, made e.g. of poly-acetate

Patent Assignee: DRAENERT K (DRAE-I)

Inventor: DRAENERT K

Number of Countries: 013 Number of Patents: 007

Patent Family:

	<i>2</i> ·						
Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 3445709	Α	19860619	DE 3445709	Α	19841214	198626	В
WO 8603667	Α	19860703	WO 85EP709	Α	19851216	198628	
EP 205512	Α	19861230	EP 86900130	Α	19851216	198652	
JP 62501130	₩.	19870507	JP 86500438	Α	19851216	198724	
EP 205512	В	19910605				199123	
DE 3583144	G	19910711				199129	
JP 2738677	B2	19980408	WO 85EP709	Α	19851216	199819	
			JP 86500438	Α	19851216		

Priority Applications (No Type Date): DE 3445709 A 19841214 Patent Details: Main IPC Patent No Kind Lan Pg Filing Notes DE 3445709 Α 23 A G WO 8603667

Designated States (National): JP US

Designated States (Regional): AT BE CH DE FR GB IT LU NL SE

EP 205512 A G

Designated States (Regional): AT BE CH DE FR GB IT, LI LU NL SE

EP 205512 В

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

JP 2738677 6 A61F-002/28 Previous Publ. patent JP 62501130 Based on patent WO 8603667

- ... Abstract (Basic): Closure device of surgical material is shaped so that it seals defects and/or holes in the bone and/or marrow cavity against the internal pressure of the bone channel and/or marrow cavity. The device is pref. made of resorbable and/or non-resorbable, organic and/or inorganic material, e.g. tricalcium phosphate...
- ...and/or a metal. It may be coated with a mixt. of inorganic filler (e.g. porous particles of (A) or hydroxyapatite) and an organic matrix (e.g. polypeptide, collagen, polyglycolate or polylactate...

#### 22/3,K/1 DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 015582600 \*\*Image available\*\* WPI Acc No: 2003-644757/200361 XRAM Acc No: C03-176180 XRPX Acc No: N03-512892 Enhancement of mechanical function of intervertebral disc during repair and replacement of damaged vertebral discs , involves extracting nucleus pulposus from allogenic and/or xenogenic source and implanting extracted pulposus Patent Assignee: DONDA R S (DOND-I); SANDER T (SAND-I); SEID C A (SEID-I); SUTTERLIN C E (SUTT-I) Inventor: DONDA R S; SANDER T; SEID C A; SUTTERLIN C E Number of Countries: 001 Number of Patents: 001 Patent Family: Patent No Kind Date Applicat No Kind Date Week US 20030069639 A1 20030410 US 2001283891 P 20010414 200361 B US 2001288961 Р 20010506 US 2001328283 Ρ 20011009 US 2002123033 Α 20020415 Priority Applications (No Type Date): US 2002123033 A 20020415; US 2001283891 P 20010414; US 2001288961 P 20010506; US 2001328283 P 20011009 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes US 20030069639 A1 19 A61F-002/44 Provisional application US 2001283891 Provisional application US 2001288961 Provisional application US 2001328283 Enhancement of mechanical function of intervertebral disc during repair and replacement of damaged vertebral discs , involves extracting nucleus pulposus from allogenic and/or xenogenic source and implanting extracted pulposus Abstract (Basic): Mechanical function of an intervertebral disc of a patient is enhanced by extracting at least one nucleus pulposus from an allogenic and/or xenogenic source and implanting the extracted nucleus pulposus 1) an extracted nucleus pulposus from an allogenic or xenogenic source for injection into human intervertebral disc; $(\ldots$ ...2) a composition capable of restoring natural mechanical properties to the intervertebral disc under going degenerative disc disease, which contains clonally expanding populations of stem cells... ...4) an improvement in treating intervertebral under going regenerative

...5) an implant, which comprises an intervertebral **disc** attached to upper or lower vertebra that are machined to provide mechanical inter lock between interpart vertebra and corresponding body in situ...

growth factors...

disc disease, which involves injecting a solution capable of restoring
natural mechanical function of a damaged disc into the disc and
restoring normal functioning of the disc by enriching extracellular
matrix of the disc through production of glycosaminoglycan and

- ...6) method for repairing damaged vertebral column in a patient, which involves identifying the location of the damaged disc, extracting the damaged disc, procuring the implant extracted from allogenic or xenogenic source and comprising the disc attached to upper and lower and machining the vertebrae of the implant and the vertebrae of the patient to be secured together...
- ...7) method for repairing prolapsed intervertebral disc, which involves dissolving of prolapsed material followed by injection of suitable amount of chondroprotective material, proteoglycan synthesizing material and/or filler material to restore normal structure to the disc;
- ...8) method of restoring normal properties to a damage intervertebral
  disc , which involves injecting the composition comprising
  chondroprotective material optionally with biologically active
  material(s) into a patient at the site of need...
- ...For **repairing** , and restoring normal properties of damaged intervertebral **disc** and for treating **discs** undergoing degenerative **disc** disease (all claimed...
- ...The novel implants and implant procedures serves to restore the natural mechanical properties of cartilage and provide alternative surgical method for repair of cartilage found in association with joints in a less invasive manner. The methods avoids deleterious side effects, such as stress and pain associated with degeneration of adjacent discs or tissue rejection. The methods improves mechanical functioning of weakened disc and are utilized in complete replacement of damaged nucleus pulposus with a healthy donor nucleus pulposus. Transplantation offers new approaches to the repair of disc herniation and degenerative disc diseases articular joint disorders...
- ...figure shows front view of one embodiment of an implant of the present invention prior to machining to create mechanical interlock. The dotted represents vertebral **bone** to removed during machining...

# ...intervertebral **disc** (101 Technology Focus:

- Preferred Method: The endogenous nucleus pulposus removed for intervertebral <code>disc</code> of a patient is treated with various growth factor, such as epidermal growth factor (ECF), transforming growth factor-alpha (TGF-alpha), transforming growth factor-beta (TFG-beta), human endothelial cell growth factor (ECGF), granulocyte macrophage colony stimulating factor (GM-CSF), bone morphogenetic protein (BMP), nerve growth factor (NGF), vascular endothelial growth factor (VEGF), fibroblast growth factor (FGF), insulin-like growth factor (IGF), cartilage derived morphogenetic protein (CDMP) and/or platelet derived growth factor (PDGF); and stem cells, fibroblast, muscles cells and/or neuronal cells. The nucleus pulposus aspirated from allogenic intervertebral <code>disc</code> was stored for at least 24 hours before implanting into the patient. Preferred Implant: The implant adapted to be received in the vertebral column of...
- ...mechanical stress placed on the column. The implant is machined to form an interlocking design such as dove tail, tongue and groove, keyhole and/or **bone** bridge...

- ...pluripotent and/or multipotent stem cells which are capable of differentiating into chondroblasts, fibroblasts, secretory cells and/or mature notochord cells. The composition enriches extracellular matrix of the disc through production of growth factors, proteoglycan and/or glycosaminoglycan. The composition is useful in preventing, inhibiting reversing effect of degenerative disc disease...
- ...Preferred Material: The chondroprotective material is glycosaminoglycans, including hyaluronic acid, ground annulus fibrosus, nucleus pulposus, proteoglycans, antioxidants amphiphilic derivatives of sodium alginate, recombinant osteogenic protein-1 (OP-1), phospholipids, Zyderm, Zyplast, Fibrel, Dermalogen, Micronized Alloderm, Isologen, medical grade...

Extension Abstract:

A patient having symptoms of degenerative disease was examined and damaged disc was identified through MRI imaging. A 25-gauge needle with a 5 ml injector was inserted percutaneously into the damaged intervertebral disc and the nucleus pulposus was aspirated. A second identical procedure was conducted to obtain healthy, allogenic, cadaveric nucleus pulposus. The healthy nucleus pulposus was infused with growth factors and selected stem cells to help speed recovery, and then injected into the disc cavity to replace the endogenous nucleus pulposus extracted. Disc degeneration decreased following insertion of the healthy nucleus pulposus.

... Title Terms: DISC ; REPAIR ;

16/7/9 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0013084432 BIOSIS NO.: 200100256271

Bone augmentation for prosthetic implants and the like

AUTHOR: Comfort Christopher J (Reprint) AUTHOR ADDRESS: Sunnyvale, CA, USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1240 (1): Nov. 7, 2000 2000

MEDIUM: e-file ISSN: 0098-1133

DOCUMENT TYPE: Patent RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Bone augmentation in a mammalian body by insertion of a mesh comprising one or more fibrillar wires having a coating into a bone cavity or socket. The one or more fibrillar wires are arranged or assembled into a woolly structure, which may be infused or cultured with a bone morphogenic protein. The mesh is sealed in the cavity to permit new bone to form over time, resulting in an osteointegrated matrix of bone reinforced by the fibrillar wires of the mesh.

14/3,AB/53 (Item 14 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

013760707

WPI Acc No: 2001-244919/200125

XRAM Acc No: C01-073530 XRPX Acc No: N01-174385

Method of sealing hole of body, involves introducing cylindrical mesh into hole and moving one end of mesh partially through mesh interior portion, for mesh to expand radially outwards against sides of hole

Patent Assignee: NUVASIVE INC (NUVA-N)

Inventor: GILLESPIE W D; MARINO J F; MATSUURA D G; PASTORE S M

Number of Countries: 093 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week WO 200121246 A1 20010329 WO 2000US25678 A 20000919 200125 B AU 200138857 A 20010424 AU 200138857 A 20000919 200141

Priority Applications (No Type Date): US 99154969 P 19990920 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200121246 A1 E 33 A61M-029/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
AU 200138857 A A61M-029/00 Based on patent WO 200121246

Abstract (Basic): WO 200121246 A1

Abstract (Basic):

NOVELTY - The hole in body portion is sealed by introducing a cylindrical mesh into the hole and moving at least one end of the mesh at least partially through an interior portion of the mesh, such that the mesh expands radially outwards against sides of the hole .

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Device for **sealing** a **hole** in body, comprising a cylindrical **mesh** formed of several helical strands
- (b) A method of sealing surgically formed hole in body USE For sealing holes in body portion such as bones, formed due to surgical drilling of patient's annulus, intervertebral disc such as nucleus pulposus formed after annulotomy. Also useful for sealing natural occurring holes in body.

ADVANTAGE - The method enables rapid healing of **holes**, by providing lattice structure to enhance tissue growth. The annulotomy **closure** system accommodates various sizes and geometries of annular **holes**, encountered by the surgeon. The system allows normal movement during healing, since the system remains transversely flexible and is positioned stable along its longitudinal axis. The soft and flexible edge of the **mesh** material, present in the system enables atraumatic nerve adjustment. The exposed portion of **mesh**, projecting out of the **hole** is atraumatic and minimizes potential irritation caused due to tissue contact with soft and flexible nature of **mesh**. The interlocking assembly of opposite faces of disc forms a solid structure

which reduces radial movement of respective apexes.

```
Set
       Items
             Description
         20 AU='MATSUURA D G'
S1
S2
          20 AU='GILLESPIE W D'
             AU='MARINO J F'
S3
          37
S4
          1
             AU='PASTORE S M'
S5
          62
             S1:S4
      12498 ANNULUS? OR ANNULOT?
S6
S7
      108726 MESH
S8
         233 S6 AND S7
             S5 AND S8
S9
           1
     1930851 SEAL? OR CLOSE? OR CLOSING? OR CLOSURE?
S10
     2204457 HOLE? ? OR OPENING?
S11
        3199 S7 AND S10 AND S11
S12
S13
      203198 (BODY OR BONY OR INTERVERTEBRAL) (3N) (PART? ? OR STRUCTURE?
         ? OR DISC? ? OR DISK? ?)
         79 S12 AND S13
S14
File 347: JAPIO Nov 1976-2004/Aug (Updated 041203)
        (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200481
        (c) 2004 Thomson Derwent
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Description
Set
      Items
             HOLE? ? OR CAVIT??? OR OPENING? ?
S1
     1510333
S2
     1296197 SEAL??? OR CLOS??? OR REPAIR???
      486418 DISC? ? OR DISK? ? OR BONE? ? OR BONY OR BODY(2N)PART? ? OR
S3
            CARTILAG?
      494777 MESH? OR MATRIX? OR FABRIC?
S4
      171191 S2(5N)S1
S5
             S5 (S) S4
S6
        2064
S7·
         76 S3(S)S6
      902519 CYLIND? OR TUBULAR?
S8
         56 ANNULUS() FIBROSUS OR ANNULOTOMY
S9
             S7 AND S8
S10
          20
             S7 AND S9
S11
          0
          20
              S10
S12
              S7
S13
          76
S14
             S15 NOT S13
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S15
    1233790 PY=2002
S16
    1276032 PY=2003
S17
     1173489 PY=2004
S18
         76 S13
S19
         40 S19 NOT S15:S18
S20
         780 S1 AND S2 AND S3 AND S4
S21
      2 S9 AND S21
S22
     752264 CYLINDER? OR CYLINDRICAL?
143 S21 AND S23
S23
S24
     1838973 END? ?
S25
     136570 EXPAND? ?
S26
S27
      281576 RADIAL??
S28
        4891 S25 AND S26 AND S27
S29
        2 S24 AND S28
    1 S29 NOT S22
S30
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200481
        (c) 2004 Thomson Derwent
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?

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Description
Set
        Items
S1
      1432538
                MESH
                ANNUL?? OR ANNULOTOMY
S2
       112627
                SEAL? OR CLOSE? OR CLOSURE? OR CLOSING?
S3
      2822199
                HOLE? ? OR OPENING?
S4
       792274
S5
        72606
                S3 (S) S4
                S1 AND S5
S6
         1072
                S2 AND S6
S7
            4
S8
                RD (unique items)
            4
                (BODY OR BONY OR BONE) (3N) (PART? ? OR STRUCTURE? ?)
S9
        78395
                (VERTEBRA? OR INTERVERTEBRA?)()(DISC? ? OR DISK? ?)
S10
        47837
                S9 OR S10
       125996
S11
                S6 AND S11
S12
            7
                S8 OR S12
S13
           11
                RD (unique items)
S14
           10
       2:INSPEC 1969-2004/Dec W2
File
         (c) 2004 Institution of Electrical Engineers
       5:Biosis Previews(R) 1969-2004/Dec W1
File
         (c) 2004 BIOSIS
       6:NTIS 1964-2004/Dec W1
File
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2004/Dec W2
File
         (c) 2004 Elsevier Eng. Info. Inc.
     34:SciSearch(R) Cited Ref Sci 1990-2004/Dec W2
File
         (c) 2004 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
     73:EMBASE 1974-2004/Dec W2
File
         (c) 2004 Elsevier Science B.V.
File 155:MEDLINE(R) 1951-2004/Dec W1
         (c) format only 2004 The Dialog Corp.
     35:Dissertation Abs Online 1861-2004/Dec
File
         (c) 2004 ProQuest Info&Learning
     65: Inside Conferences 1993-2004/Dec W3
File
         (c) 2004 BLDSC all rts. reserv.
     94:JICST-EPlus 1985-2004/Nov W2
         (c)2004 Japan Science and Tech Corp(JST)
File 144: Pascal 1973-2004/Dec W1
         (c) 2004 INIST/CNRS
?
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Set
        Items
                Description
                HOLE? ? OR CAVIT??? OR OPENING? ?
S1
      1425775
                SEAL??? OR CLOS??? OR REPAIR???
S2
      3360829
S3
      2668961
                DISC? ? OR DISK? ? OR BONE? ? OR BONY OR BODY(2N)PART? ? OR
              CARTILAG?
                MESH? OR MATRIX? OR FABRIC?
S4
      3936680
                S2 (5N) S1
S5
        36789
         1618
                S5(S)S4
S6
S7
           71
                S3 (S) S6
S8
       761882
                CYLIND? OR TUBULAR?
S9
         2003
                ANNULUS() FIBROSUS OR ANNULOTOMY
                S7 AND S8
S10
            3
                S7 AND S9
S11
            0
                S10
S12
            3
                RD (unique items)
S13
            3
           71
S14
                S7
                RD (unique items)
S15
           36
S16
                S15 NOT S13
           33
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Set
        Items
                Description
S1
        57428
                MESH?
S2
         2088
                ANNULUS? OR ANNULOTOMY
S3
          111
                S1 AND S2
                HOLE? ? OR OPENING?
S4
       949375
                SEAL? OR CLOS???
S5
      3340205
S6
        23133
                S5 (5N) S4
S7
                S3 AND S6
            8
                BODY OR BONE OR BONY
S8
       595194
                DISC? ? OR DISK? ?
S9
       550420
                VERTEBRA? ? OR INTERVERTEBRA? ?
S10
         4422
                S9(3N)S10
S11
          521
                S6 (S) S8
S12
          321
S13
          842
                S11 OR S12
                S13(S)S1
S14
           5
S15
          13
                S7 OR S14
                RD (unique items)
S16
          12
S17
           41
                S1(S)S6
                S11 AND S17
S18
           0
                S1 AND S12
S19
           12
                RD (unique items)
S20
           9
           6
                S20 NOT S15
S21
          907
                S2 AND S4 AND S5
S22
                S1 AND S22
S23
           74
S24
           66
                S23 NOT S7 NOT S14:S21
                RD (unique items)
S25
          59
                SURGERY OR SURGICAL
S26
       287696
S27
         0
                S25 AND S26
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FILE 'HCAPLUS' ENTERED AT 14:59:33 ON 22 DEC 2004
        78093 S MESH
L1
L2
        462583 S SEAL? OR CLOS!!!
        371538 S HOLE# OR OPENING#
L3
          3570 S L2(3W)L3
L4
          5317 S ANNULUS OR ANNULOTOMY
L5
           38 S L1 AND L5
L6
            0 S L6 AND L4
L7
            24 S L1 AND L4
L8
          942 S (VERTEBRAL OR INTERVERTEBRAL) () (DISC# OR DISK#)
L9
            0 S L4 AND L9 AND L1
L10
          850 S BODY()PART
L11
L12
         1897 S BODY() PART#
           74 S BONY()(PART# OR STRUCTURE#)
L13
         1970 S L12 OR L13
L14
           5 S L4 AND L14
L15
             0 S L15 AND L1
L16
        534170 S MATRIX OR FABRIC
L17
L18
        609313 S L1 OR L17
L19
            36 S L4(S)L18
            29 S L19 NOT L8
L20
            0 S L20 AND (L5 OR L9 OR L12 OR L13)
L21
             0 S L8 AND (L5 OR L9 OR L12 OR L13)
L22
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